

Parts Included

Item #	Quantity	Item Description	Part #	✓
1	Pair	Lower control arms (assembled)	DK-541908-LCA	
1A	2	FK 1" uniball	WSSX16T	
1B	2	1" uniball snap ring	WSSX16T-SR	
1C	2	Front inner bushing sleeve	DK-IB5803797	
1D	2	Back inner bushing sleeve	DK-IB5803702	
1E	2	½"-20 x 3" grade 8 bolts with SAE washes and nylocs (assembled in lca shock mounts)	N/A	
1F	4	¼"-28 zerk fitting	DK-ZF0890	
1G	8	Delrin bushing	DK-DB600025	
1H	2	Dirt King logo plate	N/A	
2	2	Upper control arms (assembled)	DK-541908-H-UCA	
2A	2	FK 1" uniball	WSSX16T	
2B	2	1" uniball snap ring	WSSX16T-SR	
2C	4	FK ¾" heim	JM12T	
2D	4	¾"-16 jam nut	DK-JN22	
2E	8	¾" heim spacer	DK-09830054	
3	4	5/8"-18 x 3.5" grade 8 bolts with SAE washers and nylocs (UCA bolts to the frame)	DK-541960	
4	2	3" tie rod extension	DK-TR4503	
5	2	18" brake lines	DK-230718	
5A	2	Brake line hold down clamp	DK-541951	
6	2	Front bolt on limit strap kit	DK-541952	
6A	2	8" limit strap	DK-LS6708	
6B	2	Adjustable limit strap clevis' with jam nuts	DK-541953	
6C	2	Bolt on limit strap mount with 5/8" SAE washers and nyloc	DK-541954	
6D	4	½"-20 x 1.25" bolts with SAE washers and nylocs	N/A	
7	2	Upper control arm spacer kit	DK-541925	
7A	2	9/16"-18 x 5.125" grade 8 bolts with SAE washers and nylocs	N/A	
7B	2	9/16" ID high misalignment spacer	DK-088700812	
7C	2	9/16" ID upper arm tapered spacer	DK-634918	
8	2	Lower control arm spacer kit	DK-541930	
8A	2	5/8"-18 x 4.5" custom grade 8 bolts with SAE washers and nylocs (one SAE washer per bolt)	N/A	
8B	2	5/8" ID half-moon spacer	DK-088800156	
8C	2	5/8" ID lower arm tapered spacer	DK-541929	

Long Travel Kit Options

9	Kit	Front sway bar kit	DK-541955	
9A	2	Sway bar end link assembled with HRSMX8T heims and jam nuts	DK-541956	
9B	4	½"-20 x 2" grade 8 bolts with SAE washes and top locks	DK-541955-H	
9C	2	Sway bar clevis adaptors assembled with 5/8"-11 nyloc and SAE washer	DK-541957	
9D	2	½" sway bar spacer	DK-541955-S	
10	2	Coil bucket shock mount kit	DK-541932	
11	2	Bolt on reservoir mount kit	DK-541933	
12	2	3" extended front axle shafts	DK-541948	
13	2	Spec shocks for long travel kit	DK-541941-4WD	

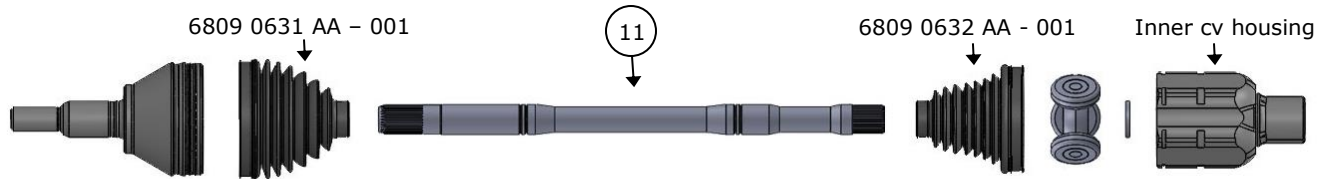
Install must be done by a qualified mechanic. Carefully read all directions before installation.

Step 1 – Axle Assembly

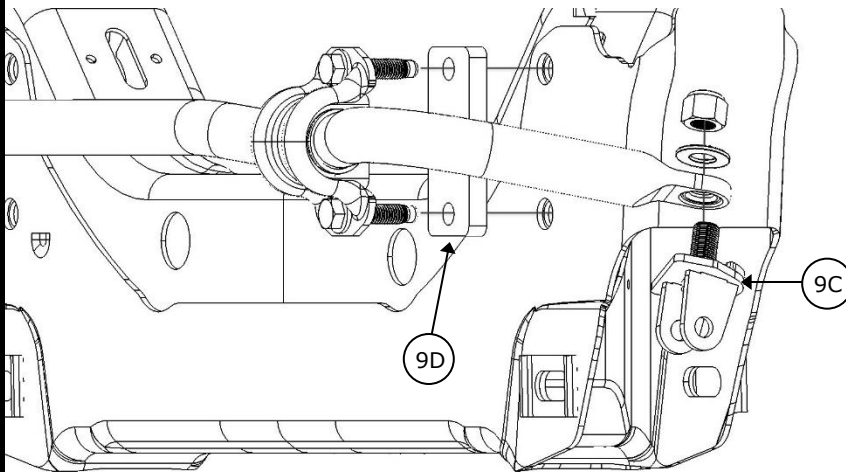
Assemble the extended axle shaft (Item 11) into the inner and outer CV's. The inner CV housing must be internally machined to allow for all of the down travel. Machine the housing at a 27° taper until it has removed material on all six edges as shown in the "After" photo. The CV housing may also be sent into Dirt King Fabrication to be machined. Do not reuse the old grease boots when assembling the axle. Due to the increased CV articulation we recommend applying epoxy to the boots so they don't separate from the CV housings.

Before

After

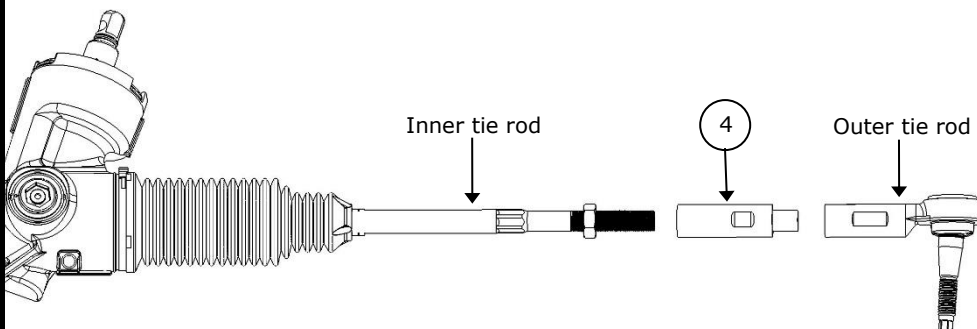


Step 2 – Sway Bar Assembly



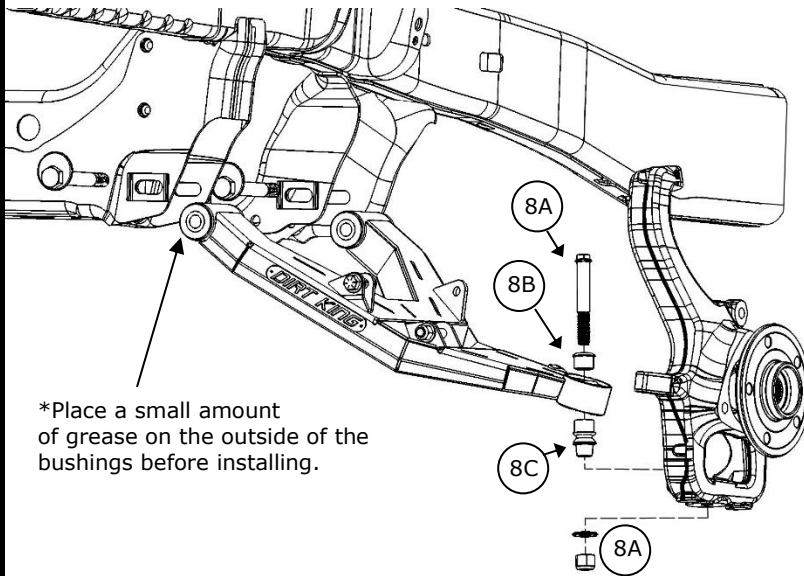
Install the 1/2" sway bar spacer (Item 9D) with the factory bolts. Apply red Loctite and torque the bolts to 85ft lbs. Now install the sway bar clevis adaptor (Item 9C). The clevis' are side specific. Torque the 5/8" nut to 125ft lbs with red Loctite on the threads.

Step 3 – Steering Assembly



Place red Loctite on the threads of the tie rod extension (Item 4) and tighten it to the outer tie rod. Once complete thread the extended outer tie rod assembly on the inner tie rod.

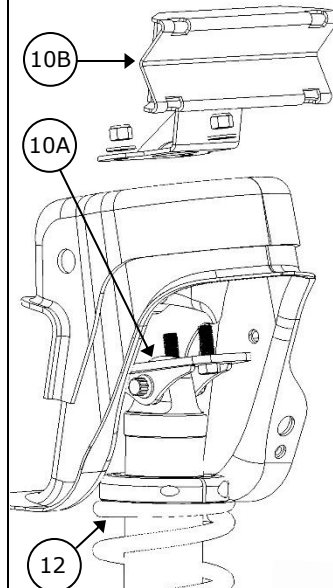
Step 4 – Lower Control Arm Installation



*Place a small amount of grease on the outside of the bushings before installing.

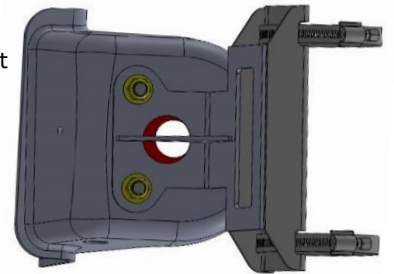
Install the lower control arm (Item 1) to the frame and tighten the alignment cams. Next insert the spacers (Item 8B & 8C) into the uniball. Install the spindle to the lower arm and torque the bolt to 150ft lbs with red Loctite on the threads. Make sure the spacers are fully inserted before tightening to prevent damage.

Step 5 – Shock Installation

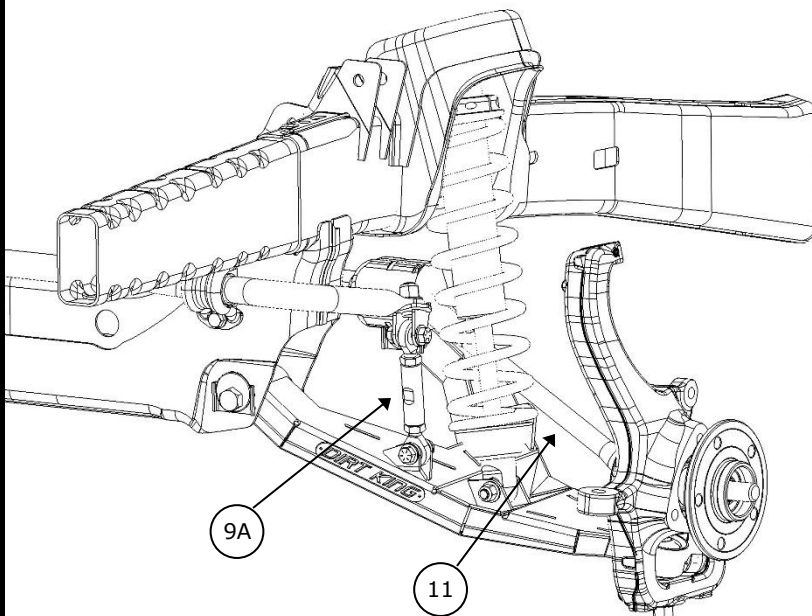


Bolt the shock (Item 12) to the shock mount (Item 10A). Now bolt them to the coil bucket along with the reservoir mount (Item 10B). Torque the nuts to 70ft lbs. Mount the reservoir to the bracket with the hose looping backwards for maximum clearance. Bolt the shock to the lower arm and torque the bolt to 85ft lbs.

*On 2014 and newer models the coil bucket may have a smaller hole on top which will need to be modified for the shock to fit. Use the reservoir mount as a template and cut out the area shown in red.

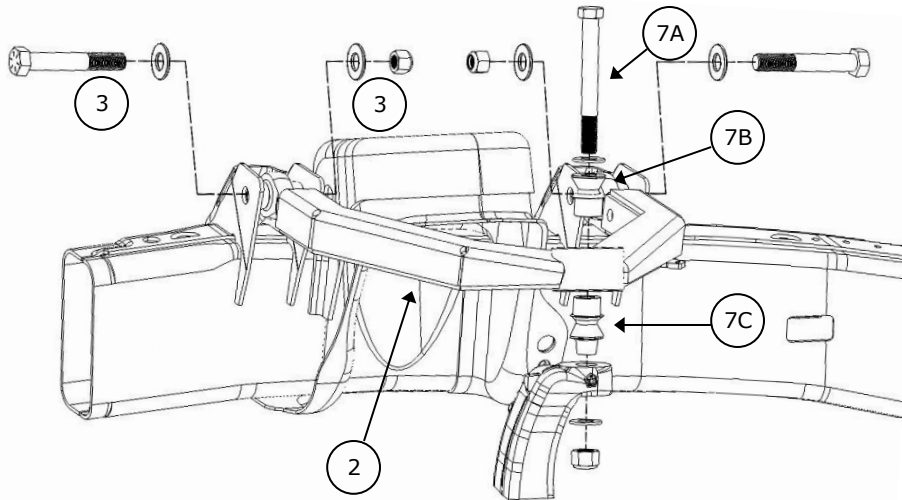


Step 6 – Sway Bar End Link & Axle Installation



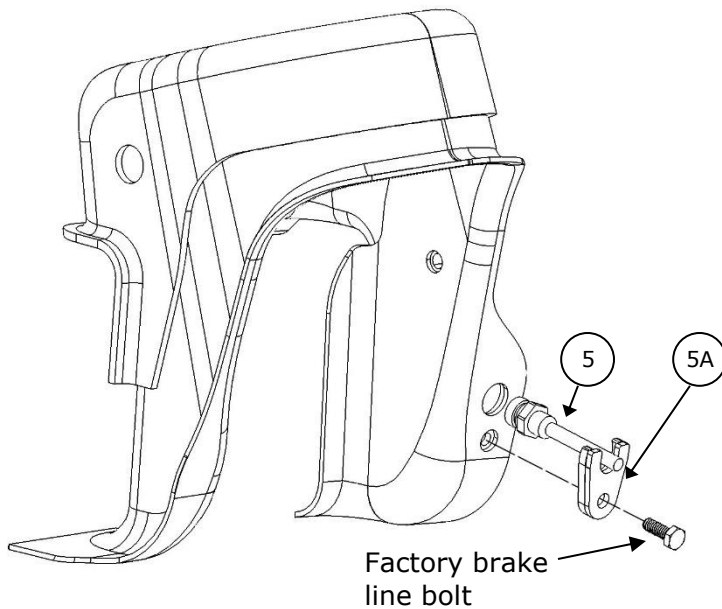
Start by installing the axle assembly into the spindle. Tilt the spindle outward and install the axle on the differential. Be cautious not to over extend the inner CV. You must also be careful not to damage the CV boots during the process. Now bolt in the sway bar end link with the supplied 1/2" bolts. Put anti-seize on the threads and torque the bolts to 85ft lbs.

Step 7 – Upper Control Arm Installation

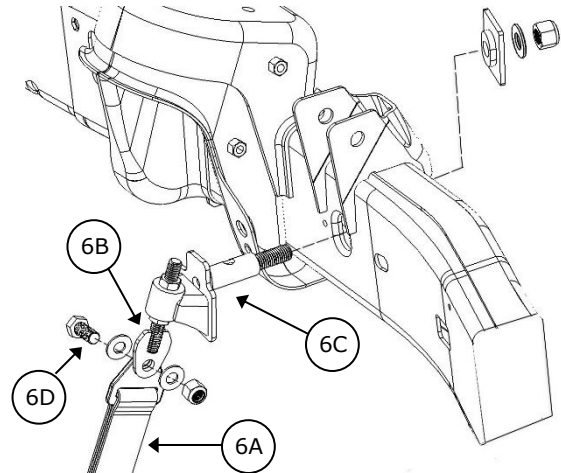


First bolt the upper control arm (Item 2) to the frame with the 5/8" grade 8 bolts (Item 3). Some models will need the holes on the frame enlarged or use the factory UCA mounting hardware. Torque the 5/8" bolts to 150ft lbs. Before installing the arm to the spindle rotate the arm upward making sure it will not come into contact with the reservoir or the hose. Bolt the arm to the spindle and torque the bolt (Item 7A) to 100ft lbs with red Loctite applied. Make sure the spacers are fully inserted before tightening to prevent damage.

Step 8 – Brake Line Installation



Step 9 – Limit Strap Installation



Install the limit strap clevis mount (Item 6C) to the frame and torque the nut to 150ft lbs. Bolt up the limit strap to the lower arm and clevis mount. Torque the limit strap bolts (Item 6D) to 85ft lbs. Make sure the clevis mount is in line with the strap. Readjust the mount if needed.

Step 10 – Final Assembly

Look over your work and verify everything is installed correctly. Bleed the brakes and set the alignment. Next adjust the limit strap clevis (Item 6B) so the limit strap (Item 6A) limits the suspension before the upper control arm spacer (Item 7B) contacts the upper control arm (Item 2) at full droop. If you plan on installing 37" tires the wheel well pinch weld needs to be folded over and the corner of the headlight bracket needs to be cut for tire clearance throughout the suspension cycle.



THE FOLLOWING TERMS AND CONDITIONS APPLY TO ALL ORDERS PLACED WITH DIRT KING FABRICATION (WEBSITE, PHONE, FAX, MAIL, OR E-MAIL), EITHER DIRECTLY OR THROUGH A DEALER, CONSTITUTE THE ACKNOWLEDGEMENT AND ACCEPTANCE OF ALL THE CONDITIONS LISTED BELOW:

All products sold or manufactured by Dirt King Fabrication are intended for off-road use only. Our suspension systems are not to be modified from its original design in any way. Dirt King Fabrication is not responsible or liable for any accidents, injuries or deaths that may occur from the use of any products offered. Installation of this system will alter the center of gravity of the vehicle and may increase the risk of a roll over as compared to stock. It is the responsibility of the customer to check if any products will void their vehicles warranty before installation. Customer assumes all liability in assuring that parts are correctly installed and maintained. We are not responsible for products that don't fit correctly on a vehicle which has been in an accident. Consult your local laws before installing any products.

Shipping & Delivery

At this time, Dirt King Fabrication ships merchandise to locations within the United States and U.S. territories, including Alaska, Hawaii, Puerto Rico, Guam, and the US Virgin Islands. Additionally, Dirt King Fabrication ships merchandise to Canada and Mexico, but not to other international locations. The risk of loss and title for all merchandise ordered pass to you when the merchandise is delivered to the shipping carrier.

Return Policy

- Returns are only accepted within 30 days of original purchase.
- Original copy of invoice must be provided
- We are not responsible for shipping on returned products.
- 15% restocking fee will be charged on all returns.
- Deposits on custom orders or products built to order are non-refundable.
- Parts must be returned in the original package and condition as they were sent.
- No returns on items that have been damaged or installed.

Missing or Defective Parts

Dirt King Fabrication goes through various stages of quality control to insure all parts are included and packaged correctly however there may be an instance where something is looked over. If there is a missing or defective part a claim must be made with Dirt King Fabrication within 60 days of original purchase. Photos of the box's exterior and contents must be e-mailed along with a description of what's missing or defective. If the box has any holes, tears or damage from shipping Dirt King Fabrication will determine if it's a claim that must be made with the shipping carrier. For defective parts photos need to be taken prior to install.

Core Charges

- All cores must be original OEM parts. Remanufactured parts will not be accepted.
- All cores must be received within 30 days of purchase for full credit.
- Partial or no credit will be issued if core is damaged or modified in any way.

Maintenance

After initial installation parts may make a clunking or creaking sound until the heims, uniballs, and bushings settle and are broken in. After a 50 mile break in period you must go through and re-torque all of the bolts. Over time you will also need to apply a Teflon based dry lubricant spray to the uniballs and heims. The bushings will need to be greased through the zerk fittings. This will increase the lifespan of the joints and help prevent them from making noise. Inspect these items periodically for unusual wear and replace if necessary. Replacement is necessary if any of the heims, uniballs, or bushings has an excessive amount of movement.

Driver Side

- Machine inner cv housing and install extended axle into the factory cv's.
- Install the 1/2" sway bar spacer and torque bolts down to 85ft lbs with red Loctite applied.
- Install sway bar clevis adaptor and torque nut down to 125ft lbs with red Loctite applied.
- Put red Loctite on the threads of the tie rod extension and tighten it to the outer tie rod.
- Install the lower arm to the frame with grease on the outside of the bushings.
- Bolt the lower arm to the spindle and torque the bolt to 150ft lbs with red Loctite applied.
- Install the shock and reservoir bracket. Torque lower shock bolt to 85ft lbs and upper nuts to 70ft lbs.
- Install the axle assembly to the spindle and differential.
- Bolt in the sway bar end link by applying anti-seize to the threads and torque the bolts to 85ft lbs.
- Install the upper arm to the frame and torque the 5/8" bolts to 150ft lbs. Check reservoir clearance as well.
- Install the upper arm to the spindle and torque the bolt to 100ft lbs with red Loctite applied.
- Install the extended brake lines.
- Bolt the limit strap mount to the frame and torque the nut to 150ft lbs followed by installing the limit strap.

Passenger Side

- Machine inner cv housing and install extended axle into the factory cv's.
- Install the 1/2" sway bar spacer and torque bolts down to 85ft lbs with red Loctite applied.
- Install sway bar clevis adaptor and torque nut down to 125ft lbs with red Loctite applied.
- Put red Loctite on the threads of the tie rod extension and tighten it to the outer tie rod.
- Install the lower arm to the frame with grease on the outside of the bushings.
- Bolt the lower arm to the spindle and torque the bolt to 150ft lbs with red Loctite applied.
- Install the shock and reservoir bracket. Torque lower shock bolt to 85ft lbs and upper nuts to 70ft lbs.
- Install the axle assembly to the spindle and differential.
- Bolt in the sway bar end link by applying anti-seize to the threads and torque the bolts to 85ft lbs.
- Install the upper arm to the frame and torque the 5/8" bolts to 150ft lbs. Check reservoir clearance as well.
- Install the upper arm to the spindle and torque the bolt to 100ft lbs with red Loctite applied.
- Install the extended brake lines.
- Bolt the limit strap mount to the frame and torque the nut to 150ft lbs followed by installing the limit strap.

Both Sides

- Bleed the brakes.
- Make sure the wheel wells have proper clearance for the tires.
- Set the limit straps to limit the suspension before the upper arms contact the spacers.
- Do a visual check on all your work and have the alignment done.